DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028796
Date Inspected: 29-Nov-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: Steve Jensen and William Sherwood

CWI Present:	☑ Yes	☐ No					
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower elevation 155 meters, QA randomly observed ABF welder Richard Garcia continuing to perform seal welding between the Tower head diaphragm and tower head skin plate ‘G’. The welder was observed seal welding inside East shaft and North shaft chimneys with weld designation 8TSA6-2 and 8TSA6-3. The welder was noted seal welding in utilizing self-shielded Flux Cored Arc Welding (FCAW-S) with 0.072” diameter E71T-8 wire electrode. Prior seal welding, the paint coating on both sides of the joint was ground off and the plates were preheated to more than 150 degrees Fahrenheit. During the shift, QA noted ABF QC Fred Michels was on site monitoring the in process preheats and welding parameters with measured working current of 345 amperes and voltage of 23.4 volts. At the end of the shift, seal welding of the Tower head diaphragm to Tower head skin plate ‘G’ with weld designations mentioned above was completed.

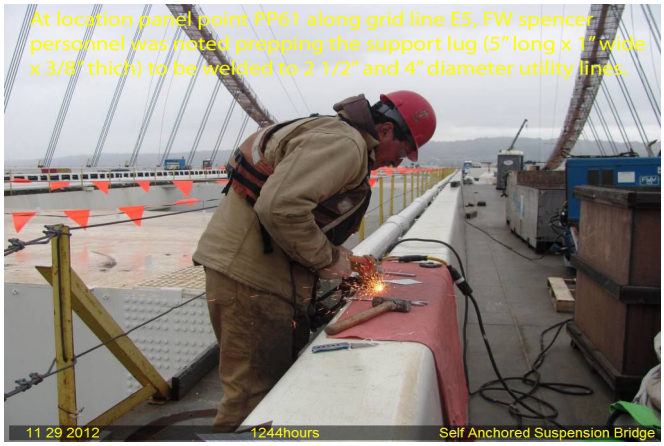
At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC VT/MT on the East and West Hinge ‘K’ lifting lug removal and the repaired base metal due to undercut/indications. The QA verification was performed to verify that the welding and the VT/MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the welds and the QC inspection complied with the contract documents.

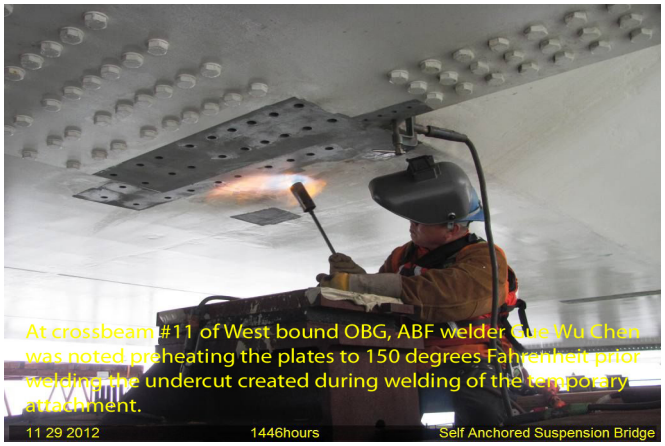
1. West Hinge ‘K’ Lift Lug #1 to #4 – lifting lug removal QA verified.
2. East Hinge ‘K’ Lift Lug #1 to #4 – lifting lug removal QA verified.

At OBG crossbeam # 11 outside, ABF welder Wu Gue Chen was observed overhead welding/fixing the removal of welded temporary attachments. The welded temporary attachment shims are located underneath the OBG particularly where the cross beams are bolted. During the initial inspection where access were available, welded temporary attachments at cross beam number 11 along the West bound were noted having undercut that requires fixing through welding. During the shift, ABF welder Gue Wu Chen has ground smooth the removal of some of the welded temporary attachment and welded those that require welding. Together with ABF QC Bernie Docena, this QA performed visual inspection and Magnetic Particle Testing (MT) on the removal of some of the attachments. This should continue on all cross beams along the East and West bound.

FW Spenser:

The QAI observe the ongoing installation, field fit-up and tack welding of the utility pipe support lug 5” long x 1” wide x 3/8” thick along the E5 grid line (panel point P61). The QC inspection was performed by Steve Jensen utilizing the Welding Procedure Specification (WPS) identified as Fillet Murex to monitor the tack welding and fillet welding to verify the welding parameters. The welding parameters were observed and recorded as 90 amps utilizing 2.4 mm electrodes with the welding performed in the 2F/4F positions. The tack welding/fillet welding was performed and completed by FW Spencer welder Damian Llanos. Due to bad weather condition at the job site, the welder stopped tack welding and went home early.





WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversation today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer